AT-MC105XL
Media Converter UTP to Fiber (ST) 850 nm

AT-MC106XL
Media Converter UTP to Fiber (SC) 850 nm

Fast Ethernet Performance

100SX Media Converters

Complete Range of Fiber Connections

The Allied Telesyn range of 850 nm fiber Fast Ethernet media converters allows users to extend the size of UTP networks with the use of fiber cabling. Converting between 100Base-TX and 100Base-SX fiber quickly and reliably, the AT-MC105XL and AT-MC106XL address the growing demand for a low-cost solution for fiber installations of 300 meters or less. To maximize flexibility, the converters are available in ST (AT-MC105XL) and SC (AT-MC106XL) fiber connector styles.

Auto-Negotiation and MissingLink

When connecting media converters to auto-negotiating Fast Ethernet switches, these media converters will automatically connect the link in either full or half-duplex mode, allowing the link to be established with the greatest bandwidth. Alternatively, the MissingLink feature allows accurate reporting to network management systems as well as allowing devices with redundant link capability to be inter-connected with these media converters, as a failure in one fiber link will be signalled to the switch, allowing the second link to become active.

Simple Installation

All the media converters with a UTP connection feature an internal MDI/MDIX switch, allowing the converter to be connected to either a PC, hub or switch with a simple UTP cable. The media converters also allow the installer to test the integrity of fiber connection, by forcing the converters to communicate over the fiber cable. This Link Test feature allows installers to check for cable faults without the need for expensive fiber optic test equipment.

Standalone or Rackmountable

Each small media converter is powered by an external power supply unit for use in standalone applications. Where multiple media converters are being used, up to 12 devices can be inserted into a low cost rackmount chassis, allowing all the converters to be powered by a single internal power supply. In critical applications, a second load sharing internal power supply can be installed into the rackmount chassis.

Hassle Free Support

Allied Telesyn Fast Ethernet media converters have a lifetime warranty and free technical support, ensuring trouble-free installation.

Allied Telesyn

Product	Port 1	Port 2	MDI/MDIX	Missing Link	Link Test	Half/Full Duplex
AT-MC105XL	Multi-mode fiber ST	UTP	Yes	Yes	Yes	Yes
AT-MC106XL	Multi-mode fiber SC	UTP	Yes	Yes	Yes	Yes

AT-MCR12	12 Slot rackmount chassis
AT-PWR4	Optional Load Sharing Power Supply for MCR12 Chassis

Specifications

Status Indicators

Front Panel:

Quantity	Six
Power	Indicates power is applied to the converter
Link (2)	Indicates a valid receive link exists
Receive (2)	Indicates valid data is being received by the converter
Normal	Indicates product is working in normal mode

Packet Transmission Characteristics

Round Trip Delay	0.4µs Maximum
Bit Error Rate (BER)	$<10^{-12}$

Maximum Cable Distance

TX (Category 5)	100M
SX MultiMode300M	(Full-Duplex Operation)

Fiber Optic Interface (850 nm)

Optical:	**Typical:**	**Range:**
Wavelength	850nm	800nm to 900nm
Sensitivity	-34.5 dBm average	
Max. output power		-12 dBm
Transmitter:		
Output power	62.5/125µM	-17 to -20 dBm
	100/140µM	
	50/125mM	-20.8 to -23.8 dBm

Twisted Pair Interface

UTP Differential Output Voltage

Typical	**Min.**	**Max.**
980mv	950mv	1050mv

Overshoot Voltage

Typical	**Max.**
4%	5%

Single Amplitude Symmetry

Typical	**Min.**	**Max.**
1.0062	0.98	1.02

Rise and Fall Time

	Typical	**Min.**	**Max.**
Rise	4.6ns	3.0ns	5.0ns
Fall	4.2ns	3.0ns	5.0ns

Rise and Fall Time Symmetry

Typical	**Max.**
0.4ns	0.5ns

Physical Characteristics

Dimensions:	10.5 cm x 9.5 cm x 2.5 cm (4.12 in x 3.75 in x 1.0 in)
Weight:	294 g (10.4oz)
Temperature:	
Operating	0° to 50° C
Storage	-20° to 80° C
Rel. Humidity:	5% to 80% noncondensing
Electrical/Mechanical Approvals:	
EMC	FCC Class A, IC Class A,
Safety	UL, CSA, TUV, IEC 825-1, CE compliant

Power Characteristics

Input Voltage (Auto Ranging):

External Power Supply	
Input Supply Voltage	12 VDC +/- 5%
Max Current	.5
Power Consumption	6W

Ordering Information

Part Number	**Description**
AT-MC105XL-x0	100TX to 100SX 850nm media converter with ST fiber connectors
AT-MC106XL-x0	100TX to 100SX 850nm media converter with SC fiber connectors

Where 'x' is
1 for 100-120v with U.S. power adapter
2 for 200-240v with Continental Europe power adapter
3 for 200-240v with United Kingdom power adapter
4 for 200-240v with Australia power adapter

Product Range

Allied Telesyn provides the full range of networking devices from cards, hubs or switches for both 10 and 100Mbps, in either copper or fiber media.

Allied Telesyn International and Affiliate Locations

Australia	Brazil	Canada	Germany
France	Italy	Japan	Singapore
United Kingdom	United States		

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